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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,462	03/11/2004	Brian R. Samuels	29214/40015	6413
4743 MARSHALL.	7590 10/04/200 GERSTEIN & BORUN		EXAM	INER
233 S. WACKER DRIVE, SUITE 6300			PATTERSON, MARC A	
SEARS TOWE CHICAGO, IL			ART UNIT	PAPER NUMBER
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			10/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary		Application No.	Applicant(s)			
		10/798,462	SAMUELS, BRIAN R.			
		Examiner	Art Unit			
		Marc A. Patterson	1772			
Period f	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the	correspondence address			
A SH WHII - Exte afte - If N	HORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING Do ensions of time may be available under the provisions of 37 CFR 1.1 r SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period of	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be till will apply and will expire SIX (6) MONTHS from	N. mely filed the mailing date of this communication.			
Any	ure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	, cause the application to become ABANDONE g date of this communication, even if timely file	ED (35 U.S.C. § 133). d, may reduce any			
Status						
1)🛛	Responsive to communication(s) filed on 19 Ju	ıly 2007.				
·		action is non-final.				
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
, — <del>-</del>	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposit	tion of Claims					
4)🛛	Claim(s) <u>1-3,6,7,9,12-17 and 42-54</u> is/are pend	ding in the application.				
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)[	Claim(s) is/are allowed.					
6)⊠	6) Claim(s) 1-3,6,7,9,12-17 and 42-54 is/are rejected.					
7)	')☐ Claim(s) is/are objected to.					
8)[	Claim(s) are subject to restriction and/o	r election requirement.				
Applicat	ion Papers					
9)[	The specification is objected to by the Examine	r.				
10)[	The drawing(s) filed on is/are: a) acc	epted or b) objected to by the	Examiner.			
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).			
11)	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority	under 35 U.S.C. § 119					
	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:					
,	1. Certified copies of the priority documents have been received.					
	Certified copies of the priority documents have been received in Application No					
	3. Copies of the certified copies of the prior	· ·				
	application from the International Bureau		<b>3</b>			
* (	* See the attached detailed Office action for a list of the certified copies not received.					
Attachmer	nt(s)					
	ce of References Cited (PTO-892)	4) Interview Summary				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date  Disclosure Statement(s) (PTO/SB/08)  Notice of Informal Patent Application						
	mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	6) Other:	atem Application			
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Application/Control Number: 10/798,462 Page 2

Art Unit: 1772

#### **DETAILED ACTION**

#### WITHDRAWN REJECTIONS

- 1. The 35 U.S.C. 102(b) rejection of Claims 1-3, 7, 9, 12-15 and 17 as being anticipated by Beckwith et al (WO 97/36798), of record on page 2 of the previous Action, is withdrawn
- 2. The 35 U.S.C. 103(a) rejection of Claim 6 as being unpatentable over Beckwith et al (WO 97/36798), of record on page 2 of the previous Action, is withdrawn.
- 3. The 35 U.S.C. 103(a) rejection of Claim 16 as being unpatentable over Beckwith et al (WO 97/36798) in view of Luthra et al (European Patent No. 0986957), of record on page 2 of the previous Action, is withdrawn.

### **NEW REJECTIONS**

## Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase 'comprising a crosslinked' polyvinylpyrollidone' is indefinite as Claims 1 is directed to a film consisting of nylon.

Application/Control Number: 10/798,462

Art Unit: 1772

## Claim Rejections - 35 USC § 102

Page 3

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 42 44 and 46 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Beckwith et al (WO 97/36798).

With regard to Claim 42, Beckwith et al disclose a film having a liquid absorbed therein (a solution of a modifier, therefore a liquid, is sorbed into a film; page 15, lines 2-12), the surface of the film having a surface energy, therefore a dyne level, of at least 50 dynes (page 13, line 4); the liquid is absorbed into a layer comprising polyamide which is a ether / amide block copolymer (page 10, lines 27-30 and page 11, lines 7-12); the amide polymer is nylon 12 (page 11, lines 7-12), therefore an aliphatic primary diamine, therefore formed of nylon consisting of aliphatic primary diamine and aliphatic dicarboxylic acid; the liquid is applied to the surface of the film (the film is immersed in a bath of modifier; page 14, lines 22-25) and prior to the application of the liquid the surface has been surface activated (corona treatment, therefore corona discharge; page 13, lines 16-21). However, the claimed aspects of the film being surface activated prior to the application, and of the liquid application, and of the amount of liquid being able to be absorbed by the film being higher than before the surface treatment, are given little patentable weight as the limitations are directed to process limitations.

With regard to Claims 43 – 44, the film disclosed by Beckwith et al also comprises a polyvinylpyrollidone (page 12, line 11) and is crosslinked (page 11, line 17).

Art Unit: 1772

With regard to Claim 46, the film disclosed by Beckwith et al can include any desired amount of polyvinylpyrollidone (page 12, line 5), therefore 16% by weight.

With regard to Claims 47 – 48, Beckwith et al disclose a third outer layer comprising nylon 66 (page 18, line 25).

With regard to Claim 49, Beckwith et al disclose absorption by segments of the copolymer (page 8, lines 16-20); Beckwith et al therefore disclose absorption through the entire thickness of the nylon

With regard to Claim 50, the film disclosed by Beckwith et al has a thickness of 5 micron (page 11, line 24).

# Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 1-3, 6-7, 9, 12-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erk et al (U.S. Patent No. 4,560,520) in view of Shimizu (U.S. Patent No. 6,352,762 B1).

With regard to Claims 1-3, 9 and 13, Erk et al disclose a nylon film having a liquid absorbed therein (polyamide; column 5, lines 6-12) for packaging food (column 1, lines 8-10); the film has polyhexamethyleneadipamide (column 4, line 67) and Erk et al does not disclose other components; a film consisting of aliphatic primary diamine and aliphatic

Application/Control Number: 10/798,462

Art Unit: 1772

dicarboxylic acid is therefore disclosed by Erk et al. The claimed aspects of the film being surface activated prior to the application, and of the liquid application, and of the amount of liquid being able to be absorbed by the film being higher than before the surface treatment, are given little patentable weight as the limitations are directed to process limitations. Erk et al fail to disclose a dyne level of at least 50 dynes.

Shimizu et al teach a polyamide film having a dyne level of at least 50 dynes for the purpose of obtaining a film that is printable (column 3, lines 23 - 31). One of ordinary skill in the art would therefore have recognized the advantage of providing for the dyne level of Shimizu et al in Erk et al, which comprises a polyamide film, depending on the desired printability of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a dyne level of at least 50 dynes in Erk et al in order to obtain a film that is printable as taught by Shimizu et al.

With regard to Claim 6, Erk et al fail to disclose a liquid that is applied in amount of between 0.4 to 10 mg/cm<sup>2</sup>. However, Erk et al disclose a liquid that is applied in amount which provides absorbed, as discussed above. Therefore, one of ordinary skill in the art would have recognized the utility of varying the amount of the liquid applied to obtain the desired amount of liquid absorbed. Therefore, the amount of liquid absorbed would be readily determined by through routine optimization of the amount of the liquid applied by one having ordinary skill in the art depending on the desired use of the end product as taught by Beckwith et al.

It therefore would be obvious for one of ordinary skill in the art to vary the amount of the liquid applied in order to obtain the desired amount of liquid absorbed, since the amount of

Application/Control Number: 10/798,462

Art Unit: 1772

liquid absorbed would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Erk et al.

With regard to Claim 7, the film disclosed by Erk et al is a food packaging film, as discussed above, therefore having a food contact surface.

With regard to Claim 12, the film disclosed by Erk et al is in the form of a tubular casing (column 3, line 28).

With regard to Claims 14 - 15 and 17, the liquid disclosed by Erk et al comprises a composition comprising an additive for transfer to a food product comprising a flavoring agent (smoke; column 1, lines 22 - 26) the liquid therefore comprises an anti – viral agent as it induces eating, and therefore destruction of the food product and thus prevents the infection of the food product with viruses.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Erk et al (U.S. Patent No. 4,560,520) in view of Shimizu (U.S. Patent No. 6,352,762 B1) and further in view of Luthra et al (European Patent No. 0986957).

Erk et al and Shimizu et al disclose film for a food casing comprising a modifier, therefore an additive, as stated above. Erk et al and Shimizu et al fail to disclose an additive that comprises a Maillard reagent.

Luthra et al teach a film (paragraph 0001) having an additive that comprises a Maillard reagent (sugar; paragraph 0042) for a food casing (packaging for meat products; paragraph 0002) for the purpose of obtaining a food casing that provides transfer of flavor from the film (paragraph 0001). One of ordinary skill in the art would therefore have recognized the advantage

of providing for the additive of Luthra et al in Erk et al and Shimizu et al, which comprises film for a food casing, depending on the desired transfer of flavor of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time

Applicant's invention was made to have provided for an additive that comprises a Maillard

reagent in Erk et al and Shimizu et al in order to obtain transfer of flavor from the film as taught

by Luthra et al.

11. Claims 45 and 51 - 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Beckwith et al (WO 97/36798).

Beckwith et al disclose a film as discussed above. With regard to Claim 45, Beckwith et al fail to disclose a nylon comprising nylon 6. However, Beckwith discloses a nylon, as stated above, and teaches the use of nylon 6 as a nylon for use in the film (page 18, line 20) and Beckwith teaches blending of nylon with the film (page 12, lines 5-6). It would therefore have been obvious for one of ordinary skill in the art to have provided for nylon 6 as the nylon of et al as Beckwith et al teaches the use of nylon 6 for use in the film.

With regard to Claims 51 - 54, Beckwith et al fail to disclose a surface activation such that the surface has a watt density of at least  $500 \text{ w-min/m}^2$ . However, Beckwith et al disclose an amount of surface activation selected to provide a desired adhesion with a food product (page 13, lines 1 - 6). It therefore would have been obvious for one of ordinary skill in the art, through routine optimization, to have provided for sufficient surface activation to provide the desired adhesion.

## ANSWERS TO APPLICANT'S ARGUMENTS

12. Applicant's arguments regarding the 35 U.S.C. 102(b) rejection of Claims 1 – 3, 7, 9, 12 – 15 and 17 as being anticipated by Beckwith et al (WO 97/36798), 35 U.S.C. 103(a) rejection of Claim 6 as being unpatentable over Beckwith et al (WO 97/36798) and 35 U.S.C. 103(a) rejection of Claim 16 as being unpatentable over Beckwith et al (WO 97/36798) in view of Luthra et al (European Patent No. 0986957), of record in the previous Action, have been considered and have been found to be persuasive. The rejections are therefore withdrawn.

Applicant's arguments regarding the remaining rejections of the previous Action have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 9 of the remarks dated July 19, 2007, that the rejection is improper because the claimed invention is now directed to a nylon having only amide units.

However, as stated above Beckwith et al discloses a nylon having only amide units.

Applicant also argues, on page 11, that Beckwith et al disclose a polyamide having a surface energy of polyamide of no more than 45 dynes.

However, it is unclear where this disclosure is made by Beckwith et al; furthermore, as stated above, it is clear that a surface energy of 50 dynes is disclosed by Beckwith et al.

Applicant also argues on page 11 that the film of Beckwith et al, rather than the insoluble segment, sorbs liquid.

However, because the film of Beckwith et al sorbs liquid, all of the segments of Beckwith et al, including the insoluble segment, sorbs liquid.

Applicant also argues, on page 13, that absorption of water would decrease the integrity of Beckwith et al.

. However, it is unclear how the integrity would be decreased.

Applicant also argues, on page 14, that Beckwith et al fail to disclose the use of corona treatment to increase the ability of a hydrophobic nylon to absorb a liquid, or any modification of physical properties of the water – insoluble segment of a nylon.

However, the use of the corona treatment, including modification of physical properties of a water – insoluble segment, is an intended use, and is therefore given little patentable weight.

Applicant also argues, on page 15, that an ingredient that induces eating does not preclude infection because food products are not consumed immediately after preparation.

However, consuming of the food, at any time, reduces the opportunities for infection relative to eating at a later time; an ingredient that induces eating is therefore anti – viral, even if it does not preclude infection altogether.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Application/Control Number: 10/798,462 Page 10

**Art Unit: 1772** 

final action.

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marc A. Patterson, PhD. Primary Examiner
Art Unit 1772